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ABSTRACT

This study examined the retention, attrition, and graduation rates of 7,170 freshmen entering the Oregon State System of Higher Education during the 1986-1987 academic year. For the state system overall, 51.1 percent of freshmen received a bachelor's degree. On a school level, the matriculation rate varied from 62.9 percent at Oregon State University to 22.8 percent at Eastern Oregon State College; 43.9 percent of students graduated from the institution they entered as freshmen. Six-year graduation rates in selected public institutions in the West are provided for comparison. Highest attrition rates among Oregon freshmen occurred in the first year; by the fifth and sixth years, students who had stopped out started to return, yielding negative attrition rates in some cases. Results of the study are compared with national data. Numerous tables and graphs present data on demographic variables and academic preparation. (JPB)

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Oregon State System of Higher Education

ED 394 475

THE LONG AND WINDING ROAD: RETENTION, ATTRITION, AND GRADUATION OF OSSHE FRESHMEN ENTERING 1986-87

A Report to the Oregon State Board of Higher Education

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October 1994

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The Long and Winding Road: Retention, Attrition, and Graduation of OSSHE Freshmen Entering 1986-87

BACKGROUND

Development of this Study

Student retention has long been used as a measure of a college or university's success in carrying out its educational mission. The portfolio of institutional assessment tools would not be considered complete without a firm grasp of student attrition and graduation rates. Yet, although the profile of the "typical" student has changed considerably over the past decades, the format used to study student graduation and attrition has changed little, giving rise to concerns that traditional measures force institutions to define their success in terms not necessarily appropriate to their student body and institutional mission. One need only witness the controversies surrounding the implementation of graduation rate reporting associated with the federal Student Right-to-Know Act to understand the difficulty of adequately portraying successful institutional outcomes through the traditional retention study design.

Recognizing the complexity of definition and design issues in conducting a retention study, as well as the difficulty of conducting such a study for the variety of institutions represented in the Oregon State System, Chancellor's office staff nevertheless sought to develop a study of first-time freshmen that would (l) provide data similar to those developed by institutions in other states, (2) establish a baseline for each institution from which future retention activities could be monitored, and (3) permit a more complete understanding of the institutional and student characteristics affecting each OSSHE institution's retention patterns. The study presented here is the result of that effort.

The Chancellor's office has undertaken systemwide retention studies in the past, with mixed success. A study initiated in 1985 could only be partially completed since there was no central data base of degrees awarded available at that time to allow a calculation of the graduation rate. A later study of the academic progress of student athletes contained cursory data on comparable graduation rates for all first-time freshmen, but needed further expansion to be useful. With the development of a more complete central data base, the current study -- which includes several demographic and academic preparation variables -- became possible.

The current study is focused on first-time freshmen, and follows a fairly traditional research design. However, this study departs from tradition in two important areas: (1) an effort has been made to include interinstitutional graduation rates -- that is, graduation from any institution within the Oregon State System, not just from the institution in which the student entered as a freshman; and (2) further analysis has been conducted to account for demographic and academic preparation variables which have been shown in national studies to have a significant effect on an institution's graduation rate.

The data base developed for this study includes additional data on a cohort of transfer students. A study of transfer student retention and graduation will be presented in a future report.

Study Data

For each institution, the study population consists of a cohort of all first-time freshmen who entered the institution in fall, winter, or spring term of 1986-87 and were enrolled in at least twelve credit hours during their first term of enrollment. Each institutional cohort was tracked fall-to-fall for the study period from fall 1987 to fall 1993. For each fall term of the study period, a count was made of those still enrolled in that term, those who had received the bachelor's degree during the preceding academic year, and those who had neither graduated nor enrolled as of that fall term. A student who dropped out or stopped out but returned later during the study period is shown as "no longer enrolled" in the earlier fall and "still enrolled" upon return in the later fall term. In most of the data displays in this report, the number reported as "graduated" is a cumulative figure of all those who received the bachelor's degree up to the fall term reported.

In all of the individual institutional data, the number shown as "no longer enrolled" includes students who may have transferred to another OSSHE institution (and who may still have been enrolled at that institution at the end of the study period), as well as those who transferred to an institution outside of OSSHE and those who simply dropped out. The displays on interinstitutional transfers are an attempt to capture at least the number of students who receive degrees from other institutions within OSSHE.

Data have been collected on three demographic variables: residency (Oregon, nonresident U.S., and international), gender, and racial/ethnic group. In addition, data related to academic preparation -- high school grade point average and combined SAT (math and verbal) scores -- are included. The academic progress in each fall term of the study (still enrolled, graduated, or no longer enrolled) is displayed for each of these variables.

FINDINGS

Graduation Rates

Both the interinstitutional and individual institution graduation rates, as of fall 1993, are displayed in Table 1. For the State System as a whole, 51.1 percent of the 1986-87 OSSHE freshman cohort received the bachelor's degree, with a range of from 62.9 percent at Oregon State University to 22.8 percent at Eastern Oregon State College. This figure includes students in the cohort who graduated from *any* OSSHE institution, not just the institution they entered as freshmen. The graduation rate for students graduating from the institution they entered as freshmen is 43.9 percent for the system as a whole, with a range of from 56.2 percent at the University of Oregon and Oregon State University to 15.6 percent at Eastern Oregon State College.

Figures 1 and 2 show two different ways to view the data presented in Table 1. Figure 1 shows the interinstitutional graduation rates and the proportion of each institutional cohort who completed the degree either at the initial institution or at another OSSHE institution. For UO and OSU, the proportion who completed the degree at another OSSHE institution is relatively small (10 percent or less). However, for the regional colleges and to a lesser extent, PSU and OIT, the proportion who transferred to another OSSHE institution to complete the degree is much higher -- approximately 30 percent at EOSC, SOSC, and WOSC, and over 20 percent at PSU and OIT. Combined with the lower graduation rates

at these five institutions, the data in Figure 1 suggest that those schools serve as a transfer source for many students who enter as freshmen.

Figure 2 shows the data from a somewhat different angle. The graph shows the number of degrees awarded at each institution to freshmen who entered the State System (any institution) in 1986-87, and the proportion who either started and completed the degree at the same institution or started at another OSSHE institution. The most striking proportion is at PSU where only 62.6 percent of the degrees awarded to 1986-87 OSSHE freshmen were awarded to students who had started at PSU; the other 37.8 percent were awarded to students who started at another OSSHE institution and completed their degree after transferring to PSU. Figures 1 and 2 indicate that PSU serves as both a transfer source and a transfer destination for a substantial number of OSSHE freshmen. At the other end of the spectrum are OSU and UO, where relatively few students transfer in or out; most start and finish their degrees at the same institution, following a more traditional path.

Table 2 shows the detailed data, by institution, on cumulative retention, graduation, and attrition throughout the study period.

Table 3 displays six-year graduation rates in selected NCAA Division I public institutions in the West. The rates shown range from 18 percent at Boise State University to 77 percent at the University of California, Berkeley. The two Oregon universities in the group have rates higher than those of most of the institutions shown in the table. Some of the institutions on the list with the highest graduation rates -- Cal Berkeley, UCLA, and the University of Washington -- also have more selective admission requirements. As will be described later in this report, institutions which admit a larger proportion of students with higher high school GPAs and SAT scores also tend to have higher graduation rates.

Attrition

Table 4 displays fall-to-fall attrition rates for each year of the study period. The highest attrition rates are in the first year: 31.1 percent of the 1986-87 OSSHE freshman cohort did not enroll during the fall 1987 term. The first-year attrition rate ranges from 21 percent at UO to 54.4 percent at EOSC. Second-year rates are more consistent across the system, with most OSSHE institutions showing rates of between 12 and 15 percent. By the third and fourth years, attrition rates are small. In years five and six, students who had stopped out in earlier years started to return -- hence, the negative attrition rates shown in several cases. By the seventh year, all institutions show negative attrition rates -- that is, students who were "stop-outs" returned and either graduated or continued their enrollment.

Table 5 displays greater detail on attrition rates in the critical first year. OSSHE's rate of 31.1 percent is comparable to that of other institutions across the United States (29.4 percent). OSSHE men show slightly higher first-year attrition rates than do women (32.4 percent for men compared to 29.8 percent for women). First-year attrition for Asian Americans is relatively low (24.4 percent) while the rate for American Indians is high (45 percent). Nonresident students from other states and international students have lower first-year attrition rates (27.9 percent and 20.8 percent, respectively).

Time to Complete the Degree

Compared to available national data, more OSSHE students complete their degree within five years, but relatively few take longer than five years (Table 6). Of the students in the study cohort who received the bachelor's degree, 34.9 percent received the degree within four years (compared to 36.1 percent nationally), 45.7 percent received the degree within five years (compared to 31.1 percent nationally), and just 19.4 percent received the degree in more than five years (compared to 32.8 percent nationally). The distribution of degree completion time is relatively consistent across the State System, with the exception of Portland State. Comparatively few of PSU's degree recipients receive the degree within four years (just 14.6 percent), but the proportion receiving the degree within five to seven years is 43.7 percent. This trend is consistent with the larger incidence of part-time enrollment at PSU.

Demographic Variables

The distribution of the freshman cohort along demographic variables is displayed in Table 7. Nearly 85 percent are Oregon residents, just over 8 percent are from an ethnic minority group, and the number of males and females is about evenly split.

As shown in Figures 4 and 5, graduation rates across these demographic variables are relatively consistent, with the exception of the low rates for under-represented ethnic minority students: 16.7 percent for American Indian students, 19.4 percent for African Americans, and 29 percent for Hispanic/Latino students. In contrast, rates by residency, gender, and for Asian Americans and European Americans range from 43 percent to 49.3 percent. It should be noted that the OSSHE Under-represented Minority Achievement Scholarship Program (UMASP), which provides tuition waivers to under-represented minority students, was implemented in 1987-88. Later cohorts of under-represented minority freshmen would be expected to show higher graduation rates partially as a result of this and other such programs.

Tables 8, 9, and 10 show the detailed demographic data with respect to cumulative retention, graduation, and attrition throughout the study period.

Academic Preparation

The distributions of high school GPA and SAT scores among the 1986-87 freshmen show the familiar bell-shaped curve. The largest number of students entered with a high school GPA of 3.00-3.24 and a combined SAT score of 900-999 (Table 11). As Figures 6 and 7 show, there is a very clear and consistent linear relationship between either high school GPA or SAT score and college graduation rate: the higher the GPA or SAT score, the higher the graduation rate.

Tables 12 and 13 show the detailed high school GPA and SAT score data with respect to cumulative retention, graduation, and attrition throughout the study period.

The Role of Academic Preparation

In a 1993 essay on college retention rates, Alexander Astin suggests that a simple retention rate "tells us a lot more about who an institution *admits* than about how effective its retention practices are." Indeed, the OSSHE data on high school GPA and SAT scores would bear that out. Astin's 1993 longitudinal study of 39,243 students in 129 institutions showed that students with a C- high school GPA and SAT scores below 700 were five times more likely to drop out than were students with an A average and SATs above 1300. Thus, he writes, "institutions that admit large numbers of less well-prepared students will tend to have low retention rates, and those with well-prepared students will tend to have high rates, regardless of how effective their retention programs are."

The influence of these pre-college academic factors, along with the effect of ethnic group and gender on college retention, led Astin to develop formulas derived from multiple regression analyses which can be used by institutions to calculate an *expected* retention rate.

Astin's Regression Formula

Astin's regression formula consists of a constant (a) and several weighting factors (b coefficients) which, when applied to the institution's mean values for high school GPA, SAT verbal and math scores, female gender, and American Indian and African American ethnicity, result in an expected rate of degree completion and/or continued enrollment after four years. The formula is given below:

Probability of
completing a degree or
being still enrolled
after 4 years = a + b1(HSGPA) + b2(SAT-M) + b3(SAT-V) + b4(female) + b5(American Indian) + b6(African American)

This formula was applied to the OSSHE data (see Table 14), with results displayed in Figure 8. For both the University of Oregon and Oregon State University, the expected and actual completion/continuation rates are nearly the same (and well within the 10 percent margin of error Astin suggests for identifying a true discrepancy). However, for the other OSSHE institutions, actual rates are quite a bit lower than expected rates.

The fact that the distribution of actual rates follows the same pattern as the distribution of expected rates for those five institutions -- only lower -- suggests the influence of an additional phenomenon that operates on all of those schools and is only indirectly related to academic preparation, gender, and ethnicity. That phenomenon may be a combination of institutional mission and the reason the student chose the institution in the first place.

Differences in Institutional Missions

State System institutions serve different missions and student populations, not only with respect to academic programs, but also with respect to the proportion of freshmen compared

to transfer students, full-time compared to part-time students, local or place-bound students compared to more mobile students, rural compared to urban populations, and of course, admission requirements. Different combinations of these variables are likely to have an effect on completion rates.

For example, an urban institution with a high proportion of part-time students, such as PSU, would be expected to have lower four-year completion rates. (Although the study cohorts entered as full-time students, they could have enrolled on a part-time basis during the study period.) Or, an institution which serves a community college mission as well as its four-year institution mission, such as EOSC or OIT, will be more likely to enroll students with characteristics associated with lower completion rates. Other undocumented factors related to socioeconomic status, such as family income level, educational attainment of the parents, and the value placed on obtaining a college degree, may have an important effect on completion rates.

Why the Student Chose the Institution in the First Place

The variable that may explain much of the discrepancy between actual and expected completion rates may be related to the reason the student chose the institution in the first place. Many students may choose an institution with the expectation that they will transfer later, either to another OSSHE institution or to a college or university outside the State System. For EOSC, SOSC, and OIT, the absence of a nearby community college would make the OSSHE college a logical alternative while the student waited to transfer to another college or university. Portland State's proximity to a large population center makes it a likely choice for both transfers in and transfers out, as the data in Table 1 showed. And, studies conducted at WOSC found that approximately 12% of the new freshmen planned to transfer later, but wanted the experience of spending their first year or two at a small, residential campus. Many of the WOSC students indicated they planned to transfer because the college did not offer the academic program they wanted -- a factor that may affect completion rates at the other regional colleges as well.

Study Limitations

Like other similar studies across the country, this study does not track the academic progress of students once they permanently leave the State System. Many of these students may complete their education at a private or out-of-state institution. Certainly, such students should be considered academically successful, for purposes of retention, but in this study they would be categorized as no longer enrolled rather than as having graduated.

Second, it is not yet clear what effect Measure 5 has had on student retention patterns, as a result of either program reductions or tuition increases. While the implementation of Measure 5-related policies may not have affected the 1986-87 cohort, later cohorts are more likely to show effects.

Finally, it is important to maintain an appropriate perspective on the use of this study design in evaluating institutional success. For institutions with a larger proportion of traditional first-time full-time freshmen, such as OSU and UO, this type of study is a more important, although certainly not singular, measure of student outcomes. However, for

institutions in which degree-seeking first-time freshmen are a relatively small proportion of the total number of students served, such as at PSU, it is important to use a variety of other measures to evaluate successful student outcomes. In such cases, reliance on a traditional retention study, even with the additional analyses used in this study, would provide an inadequate and potentially misleading indicator of institutional success.

Future Study

To have an adequate data base from which to conduct a longitudinal study, it was necessary to start with the 1986-87 freshman cohort. Yet, in many cases, OSSHE institutional retention programs and practices have changed significantly since 1986-87. Indeed, a combination of Chancellor's office and institutional preliminary data for UO, OSU, and PSU suggest that later cohorts will show higher four- and five-year graduation rates.

The 1986-87 cohort should be viewed as the baseline against which to monitor the progress of institutional retention efforts as well as the effects of externally mandated changes, such as budget reductions. An annual update of this study is recommended.

REFERENCES

Astin, Alexander W., "College Retention Rates Are Often Misleading." *The Chronicle of Higher Education*, Point of View, 1993.

Astin, Alexander W., "How Good is Your Institution's Retention Rate?" Unpublished paper, University of California, Los Angeles, 1993.

Oregon State System of Higher Education, *Academic Progress of Student Athletes in the Oregon State System of Higher Education*. June 1990.

Oregon State System of Higher Education, *Five Year Retention Study: OSSHE Institutions Fall 1980 through 1984*. 1985.

Oregon State System of Higher Education, "Graduation Rates in OSSHE Universities." August 1992.

Porter, Oscar F., *Undergraduate Completion and Persistence at Four-Year Colleges and Universities*. National Institute of Independent Colleges and Universities, 1989.

The Chronicle of Higher Education (eds.), *The Almanac of Higher Education, 1994*. The University of Chicago Press, 1994.

U.S. Department of Education, National Center for Education Statistics, "Time to Complete Baccalaureate Degree." *Indicator of the Month*, October 1993.

Table 1

OSSHE Bachelor's Degrees Awarded to 1986-87 Freshman Cohort, as of Fall 1993: Interinstitutional Transfer and Completion Patterns

Initial Institution	Total in Cohort	Institution Where Degree Was Completed, as of Fall 1993							Total Degrees	% of Cohort Who Received Degree from Any OSSHE Institution	% of Cohort Who Received Degree from Initial Institution
		UO	OSU	PSU	WOSC	SOSC	EOSC	OIT			
UO	2,077	1,167	41	43	9	7	2	0	1,269	61.1	56.2
OSU	2,224	48	1,249	54	20	18	5	6	1,400	62.9	56.2
PSU	858	26	25	199	4	0	0	0	254	29.6	23.2
WOSC	574	22	46	9	193	2	2	1	275	47.9	33.6
SOSC	744	39	22	8	4	191	1	0	265	35.6	25.7
EOSC	294	4	12	4	1	0	46	0	67	22.8	15.6
OIT*	399	6	8	1	4	10	0	104	133	33.3	26.1
Total	7,170	1,312	1,403	318	235	228	56	111	3,663	51.1	43.9
Percent of OSSHE Degrees Awarded to 1986-87 Cohort That Were from Initial Institution		88.9	89.0	62.6	82.1	83.8	82.1	93.7	86.0		

* The OIT freshman cohort excludes students who received the associate degree only. Students who received both an associate and a bachelor's degree are included, with only the bachelor's degree counted for purposes of this study.

Interinstitutional Transfer and Completion Patterns

Figure 1
OSSHE Graduation Rates for 1986-87 Institutional Freshman Cohorts:
Completion at Initial Institution and at Other OSSHE Institutions as of Fall 1993

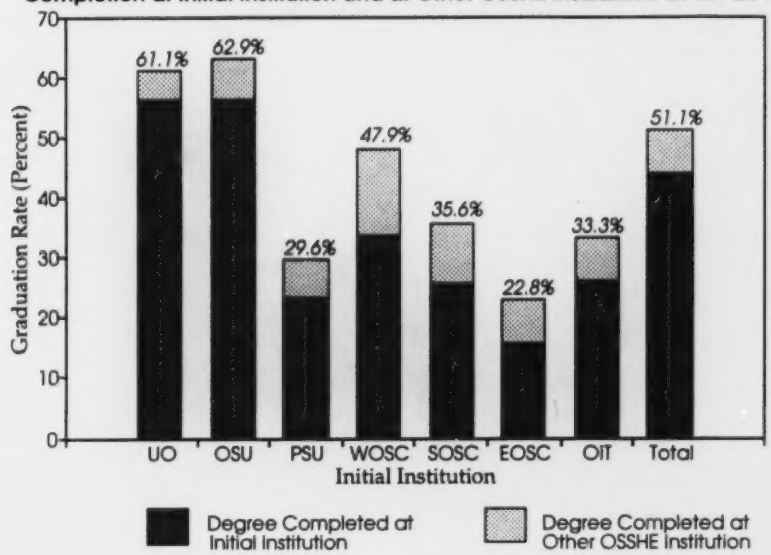


Figure 2
Degrees Completed at OSSHE Institutions by 1986-87 Entering Freshmen as of Fall 1993

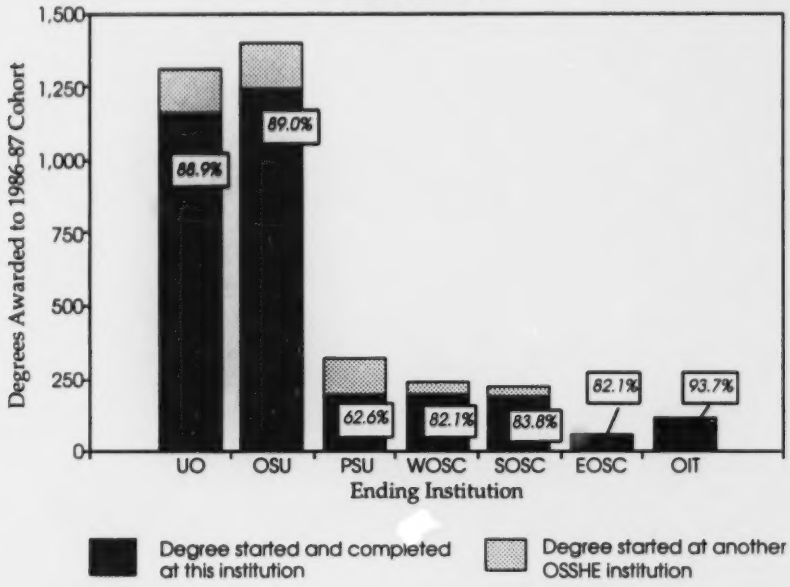


Table 2

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by Institution

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
University of Oregon														
Still enrolled	1,640	79.0	1,385	66.7	1,268	61.0	672	32.4	158	7.6	69	3.3	71	3.4
Graduated	0	0.0	0	0.0	10	0.5	439	21.1	950	45.7	1,123	54.1	1,167	56.2
Not enrolled	437	21.0	692	33.3	799	38.5	966	46.5	969	46.7	885	42.6	839	40.4
Total cohort	2,077	100.0	2,077	100.0	2,077	100.0	2,077	100.0	2,077	100.0	2,077	100.0	2,077	100.0
Oregon State University														
Still enrolled	1,671	75.1	1,397	62.8	1,297	58.3	828	37.2	219	9.8	73	3.3	77	3.5
Graduated	0	0.0	1	0.0	11	0.5	423	19.0	1,042	46.9	1,208	54.3	1,249	56.2
Not enrolled	553	24.9	826	37.1	916	41.2	973	43.8	963	43.3	943	42.4	898	40.4
Total cohort	2,224	100.0	2,224	100.0	2,224	100.0	2,224	100.0	2,224	100.0	2,224	100.0	2,224	100.0
Portland State University														
Still enrolled	468	54.5	347	40.4	288	33.6	233	27.2	127	14.8	80	9.3	63	7.3
Graduated	0	0.0	0	0.0	0	0.0	29	3.4	112	13.1	168	19.6	199	23.2
Not enrolled	390	45.5	511	59.6	570	66.4	596	69.5	619	72.1	610	71.1	596	69.5
Total cohort	858	100.0	858	100.0	858	100.0	858	100.0	858	100.0	858	100.0	858	100.0
Western Oregon State College														
Still enrolled	348	60.6	256	44.6	212	36.9	96	16.7	22	3.8	8	1.4	30	5.2
Graduated	0	0.0	2	0.3	2	0.3	91	15.9	172	30.0	190	33.1	193	33.6
Not enrolled	226	39.4	316	55.1	360	62.7	387	67.4	380	66.2	376	65.5	351	61.1
Total cohort	574	100.0	574	100.0	574	100.0	574	100.0	574	100.0	574	100.0	574	100.0
Southern Oregon State College														
Still enrolled	456	61.3	304	40.9	250	33.6	146	19.6	65	8.7	34	4.6	33	4.4
Graduated	0	0.0	1	0.1	4	0.5	62	8.3	146	19.6	177	23.8	191	25.7
Not enrolled	288	38.7	439	59.0	490	65.9	536	72.0	533	71.6	533	71.6	520	69.9
Total cohort	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0
Eastern Oregon State College														
Still enrolled	134	45.6	90	30.6	75	25.5	49	16.7	18	6.1	15	5.1	15	5.1
Graduated	0	0.0	0	0.0	0	0.0	17	5.8	37	12.6	43	14.6	46	15.6
Not enrolled	160	54.4	204	69.4	219	74.5	228	77.6	239	81.3	236	80.3	233	79.3
Total cohort	294	100.0	294	100.0	294	100.0	294	100.0	294	100.0	294	100.0	294	100.0
Oregon Institute of Technology														
Still enrolled	222	55.6	172	43.1	142	35.6	73	18.3	30	7.5	11	2.8	15	3.8
Graduated	0	0.0	0	0.0	0	0.0	37	9.3	80	20.1	101	25.3	104	26.1
Not enrolled	177	44.4	227	56.9	257	64.4	289	72.4	289	72.4	287	71.9	280	70.2
Total cohort	399	100.0	399	100.0	399	100.0	399	100.0	399	100.0	399	100.0	399	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 3

Six-Year Graduation Rates in Selected NCAA Division I Public Institutions in the West: Full-Time Freshmen Entering 1986-87

State	Institution	Grad Rate (%)
AZ	Arizona State University	45
	Northern Arizona University	36
	University of Arizona	49
CA	Calif State Univ, Fresno	50
	Calif State Univ, Northridge	31
	San Diego State University	41
	University of Calif, Berkeley	77
	University of Calif, Los Angeles	74
CO	Colorado State University	57
	University of Colorado, Boulder	66
ID	Boise State University	18
	Idaho State University	59
	University of Idaho	43
MT	University of Montana	28
NV	University of Nevada, Las Vegas	27
	University of Nevada, Reno	32
NM	New Mexico State University	38
	University of New Mexico	33
OR	Oregon State University	54
	University of Oregon	54
UT	Southern Utah University	28
	University of Utah	34
	Utah State University	46
	Weber State University	43
WA	Eastern Washington University	38
	University of Washington	63
	Washington State University	55
WY	University of Wyoming	44

Source: The Almanac of Higher Education 1994. The Chronicle of Higher Education, September 1994.

Table 4

Fall-to-Fall Attrition Rates of First-Time Freshmen Entering 1986-87

Institution	Total Cohort	Attrition Year 1	Attrition Year 2	Attrition Year 3	Attrition Year 4	Attrition Year 5	Attrition Year 6	Attrition Year 7	Attrition Cumulative
University of Oregon	2,077	21.0	12.3	5.2	8.0	0.1	-4.0	-2.2	40.4
Oregon State University	2,224	24.9	12.3	4.0	2.6	-0.4	-0.9	-2.0	40.4
Portland State University	858	45.5	14.1	6.9	3.0	2.7	-1.0	-1.6	69.5
Western Oregon State College	574	39.4	15.7	7.7	4.7	-1.2	-0.7	-4.4	61.1
Southern Oregon State College	744	38.7	20.3	6.9	6.2	-0.4	0.0	-1.7	69.9
Eastern Oregon State College	294	54.4	15.0	5.1	3.1	3.7	-1.0	-1.0	79.3
Oregon Institute of Technology*	399	44.4	12.5	7.5	8.0	0.0	-0.5	-1.8	70.2
Total	7,170	31.1	13.7	5.5	5.1	0.2	-1.7	-2.1	51.8

NOTE: Negative attrition figures indicate that students who had "stopped out" in previous years either were enrolled again or had graduated.

* The OIT freshman cohort excludes students who received the associate degree only. Students who received both an associate and a bachelor's degree are included, with only the bachelor's degree counted for purposes of this study.

Table 5

First Year Attrition Rates
(Percent of Freshman Cohort)

U. S. Public Four-Year Institutions* (High school seniors 1980)	29.4
OSSHE Total (entering freshmen 1986-87)	31.1
University of Oregon	21.0
Oregon State University	24.9
Portland State University	45.5
Western Oregon State College	39.4
Southern Oregon State College	38.7
Eastern Oregon State College	54.4
Oregon Institute of Technology	44.4
Men	32.4
Women	29.8
African American	35.5
American Indian	45.0
Asian American	24.4
Hispanic/Latino	37.0
European American/White	31.5
Oregon Resident	31.9
Nonresident U.S.	27.9
International	20.8

* Source: Porter, Oscar, Undergraduate Completion and Persistence at Four-Year Colleges and Universities. National Institute of Independent Colleges and Universities, 1989. The data used in this study are from a national longitudinal survey of 1980 high school seniors (the High School and Beyond study), the closest comparable data available for the U.S. as a whole.

Table 6

Length of Time to Complete the Bachelor's Degree: Percent Distribution of OSSHE Degree Recipients Who Entered as Freshmen in 1986-87*

	Within 4 Years	Between 4 and 5 Years	Between 5 and 7 Years
U.S. (1990 college graduates)**	36.1	31.1	32.8
OSSHE Total	34.9	45.7	19.4
University of Oregon	37.6	43.8	18.6
Oregon State University	33.9	49.5	16.6
Portland State University	14.6	41.7	43.7
Western Oregon State College	47.1	42.0	10.9
Southern Oregon State College	32.5	44.0	23.5
Eastern Oregon State College	37.0	43.5	19.5
Oregon Institute of Technology	35.6	41.3	23.1

* As a proportion of degree recipients through spring 1993.

**From U.S. Department of Education, National Center for Education Statistics, Indicator of the Month, October 1993.

Figure 3

Time to Complete the Bachelor's Degree

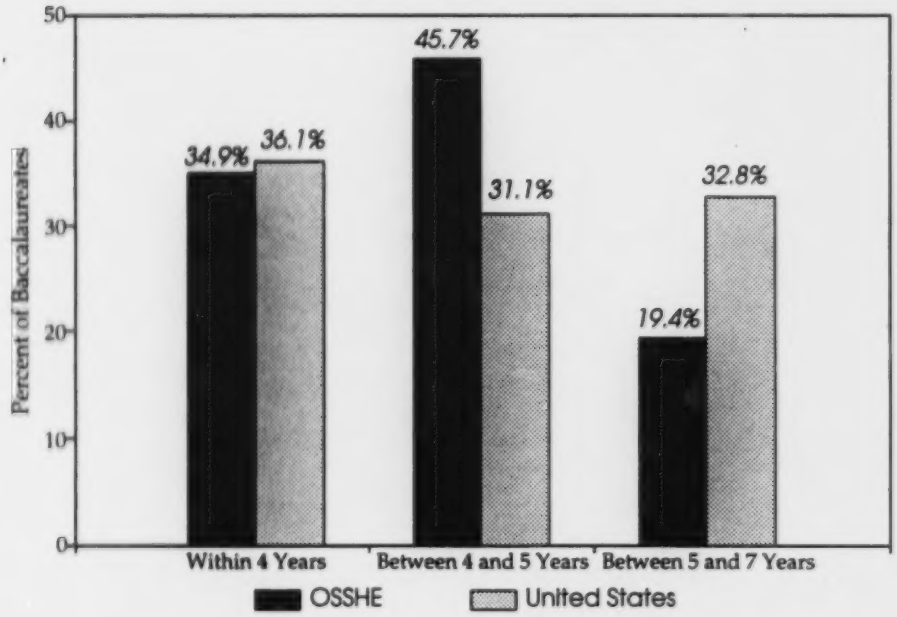


Table 7

Demographic Distribution of the 1986-87 Freshman Cohort

	Number	Percent
Residency		
Oregon Resident	6,065	84.6
Nonresident U.S.	927	12.9
International	178	2.5
Total	7,170	100.0
Gender		
Male	3,622	50.5
Female	3,548	49.5
Total	7,170	100.0
Racial/Ethnic Group		
African American	93	1.3
American Indian	60	0.8
Asian American	349	4.9
Hispanic/Latino	100	1.4
Minority Subtotal	602	8.4
European American	6,126	85.4
Nonresident Alien	179	2.5
Unknown	263	3.7
Total	7,170	100.0

OSSHE Graduation Rates as of Fall 1993 by Residency, Gender, and Racial/Ethnic Group

Figure 4

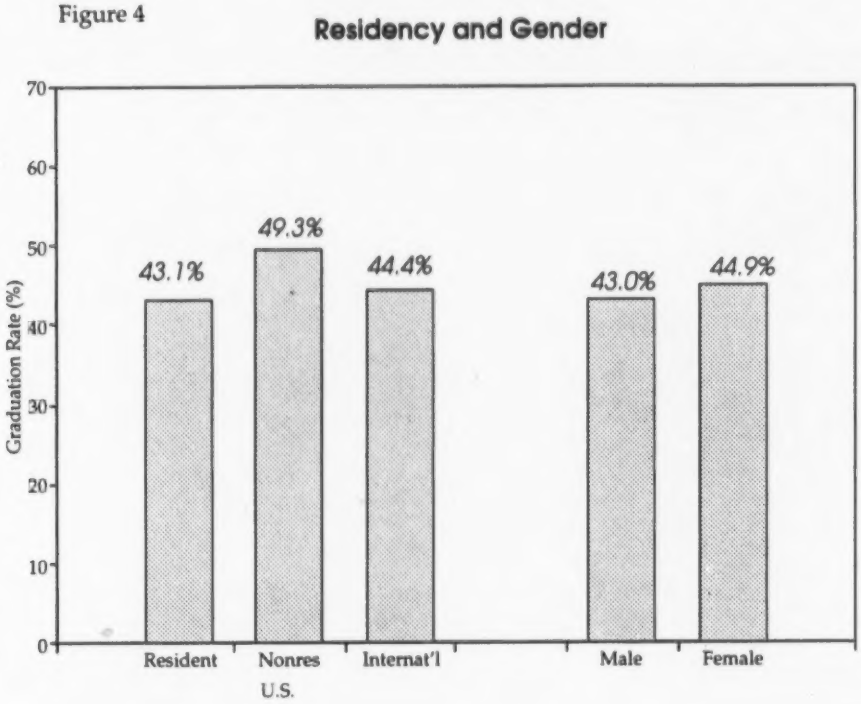


Figure 5

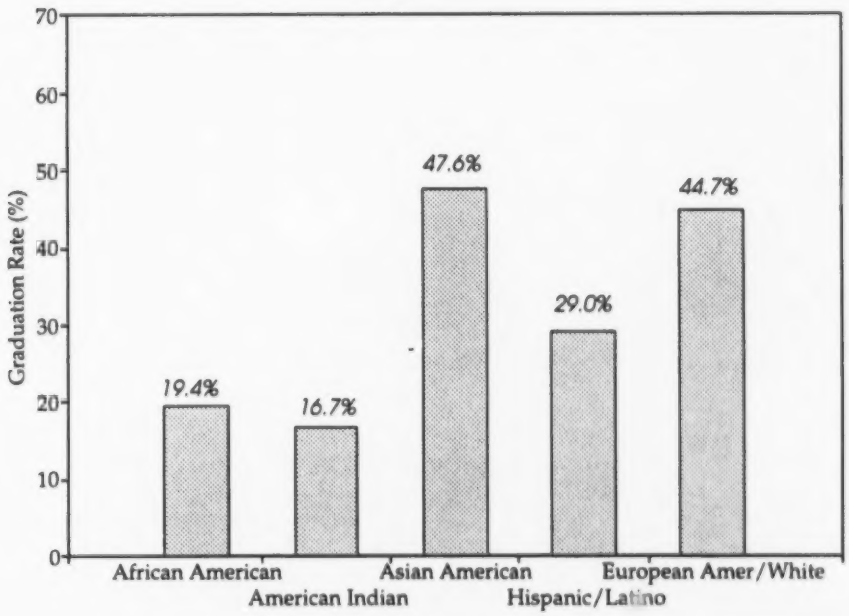


Table 8

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by Residency

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Oregon Resident														
Still enrolled	4,130	68.1	3,312	54.6	2,958	48.8	1,786	29.4	561	9.2	260	4.3	287	4.7
Graduated	0	0.0	3	0.0	19	0.3	894	14.7	2,096	34.6	2,497	41.2	2,613	43.1
Not enrolled	1,935	31.9	2,750	45.3	3,088	50.9	3,385	55.8	3,408	56.2	3,308	54.5	3,165	52.2
Total cohort	6,065	100.0	6,065	100.0	6,065	100.0	6,065	100.0	6,065	100.0	6,065	100.0	6,065	100.0
Nonresident U.S.														
Still enrolled	668	72.1	540	58.3	501	54.0	287	31.0	72	7.8	30	3.2	17	1.8
Graduated	0	0.0	0	0.0	1	0.1	155	16.7	370	39.9	434	46.8	457	49.3
Not enrolled	259	27.9	387	41.7	425	45.8	485	52.3	485	52.3	463	49.9	453	48.9
Total cohort	927	100.0	927	100.0	927	100.0	927	100.0	927	100.0	927	100.0	927	100.0
International														
Still enrolled	141	79.2	99	55.6	73	41.0	24	13.5	6	3.4	0	0.0	0	0.0
Graduated	0	0.0	1	0.6	7	3.9	49	27.5	73	41.0	79	44.4	79	44.4
Not enrolled	37	20.8	78	43.8	98	55.1	105	59.0	99	55.6	99	55.6	99	55.6
Total cohort	178	100.0	178	100.0	178	100.0	178	100.0	178	100.0	178	100.0	178	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 9

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by Gender

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Male														
Still enrolled	2,448	67.6	1,975	54.5	1,769	48.8	1,204	33.2	409	11.3	175	4.8	179	4.9
Graduated	0	0.0	2	0.1	16	0.4	434	12.0	1,183	32.7	1,464	40.4	1,556	43.0
Not enrolled	1,174	32.4	1,645	45.4	1,837	50.7	1,984	54.8	2,030	56.0	1,983	54.7	1,887	52.1
Total cohort	3,622	100.0	3,622	100.0	3,622	100.0	3,622	100.0	3,622	100.0	3,622	100.0	3,622	100.0
Female														
Still enrolled	2,491	70.2	1,976	55.7	1,763	49.7	893	25.2	230	6.5	115	3.2	125	3.5
Graduated	0	0.0	2	0.1	11	0.3	664	18.7	1,356	38.2	1,546	43.6	1,593	44.9
Not enrolled	1,057	29.8	1,570	44.3	1,774	50.0	1,991	56.1	1,962	55.3	1,887	53.2	1,830	51.6
Total cohort	3,548	100.0	3,548	100.0	3,548	100.0	3,548	100.0	3,548	100.0	3,548	100.0	3,548	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 10

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by Racial/Ethnic Group

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
African American														
Still enrolled	60	64.5	42	45.2	35	37.6	24	25.8	9	9.7	6	6.5	4	4.3
Graduated	0	0.0	0	0.0	0	0.0	3	3.2	12	12.9	17	18.3	18	19.4
Not enrolled	33	35.5	51	54.8	58	62 4	66	71.0	72	77.4	70	75.3	71	76.3
Total cohort	93	100.0	93	100.0	93	100.0	93	100.0	93	100.0	93	100.0	93	100.0
American Indian														
Still enrolled	33	55.0	20	33.3	16	26.7	14	23.3	9	15.0	6	10.0	6	10.0
Graduated	0	0.0	0	0.0	0	0.0	2	3.3	5	8.3	7	11.7	10	16.7
Not enrolled	27	45.0	40	66.7	44	73.3	44	73.3	46	76.7	47	78.3	44	73.3
Total cohort	60	100.0	60	100.0	60	100.0	60	100.0	60	100.0	60	100.0	60	100.0
Asian American														
Still enrolled	264	75.6	213	61.0	193	55.3	133	38.1	44	12.6	22	6.3	16	4.6
Graduated	0	0.0	0	0.0	1	0.3	44	12.6	127	36.4	156	44.7	166	47.6
Not enrolled	85	24.4	136	39.0	155	44.4	172	49.3	178	51.0	171	49.0	167	47.9
Total cohort	349	100.0	349	100.0	349	100.0	349	100.0	349	100.0	349	100.0	349	100.0
Hispanic/Latino														
Still enrolled	63	63.0	53	53.0	40	40.0	25	25.0	15	15.0	10	10.0	8	8.0
Graduated	0	0.0	0	0.0	0	0.0	10	10.0	22	22.0	28	28.0	29	29.0
Not enrolled	37	37.0	47	47.0	60	60.0	65	65.0	63	63.0	62	62.0	63	63.0
Total cohort	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0	100	100.0
Minority Subtotal														
Still enrolled	420	69.8	328	54.5	284	47.2	196	32.6	77	12.8	44	7.3	34	5.6
Graduated	0	0.0	0	0.0	1	0.2	59	9.8	166	27.6	208	34.6	223	37.0
Not enrolled	182	30.2	274	45.5	317	52.7	347	57.6	359	59.6	350	58.1	345	57.3
Total cohort	602	100.0	602	100.0	602	100.0	602	100.0	602	100.0	602	100.0	602	100.0
European American														
Still enrolled	4,195	68.5	3,377	55.1	3,046	49.7	1,796	29.3	521	8.5	228	3.7	255	4.2
Graduated	0	0.0	3	0.0	18	0.3	955	15.6	2,221	36.3	2,623	42.8	2,741	44.7
Not enrolled	1,931	31.5	2,746	44.8	3,062	50.0	3,375	55.1	3,384	55.2	3,275	53.5	3,130	51.1
Total cohort	6,126	100.0	6,126	100.0	6,126	100.0	6,126	100.0	6,126	100.0	6,126	100.0	6,126	100.0
Nonresident Alien														
Still enrolled	138	77.1	102	57.0	75	41.9	26	14.5	6	3.4	0	0.0	0	0.0
Graduated	0	0.0	1	0.6	7	3.9	50	27.9	74	41.3	80	44.7	80	44.7
Not enrolled	41	22.9	76	42.5	97	54.2	103	57.5	99	55.3	99	55.3	99	55.3
Total cohort	179	100.0	179	100.0	179	100.0	179	100.0	179	100.0	179	100.0	179	100.0
Unknown/Decline														
Still enrolled	186	70.7	144	54.8	127	48.3	79	30.0	35	13.3	18	6.8	15	5.7
Graduated	0	0.0	0	0.0	1	0.4	34	12.9	78	29.7	99	37.6	105	39.9
Not enrolled	77	29.3	119	45.2	135	51.3	150	57.0	150	57.0	146	55.5	143	54.4
Total cohort	263	100.0	263	100.0	263	100.0	263	100.0	263	100.0	263	100.0	263	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 11

High School GPA and SAT Distribution of the 1986-87 Freshman Cohort

	Number	Percent
High School GPA		
3.75-4.00	744	10.4
3.50-3.74	978	13.6
3.25-3.49	1,127	15.7
3.00-3.24	1,287	17.9
2.75-2.99	1,115	15.6
2.50-2.74	852	11.9
2.25-2.49	437	6.1
2.00-2.24	154	2.1
< 2.00	95	1.3
Unknown	381	5.3
Total	7,170	100.0
Combined SAT Score		
1200+	575	8.0
1100-1199	769	10.7
1000-1099	1,198	16.7
900-999	1,381	19.3
800-899	1,250	17.4
700-799	787	11.0
600-699	362	5.0
< 600	137	1.9
Unknown	711	9.9
Total	7,170	100.0

OSSHE Graduation Rates as of Fall 1993 by Entering High School GPA and Combined SAT Score

Figure 6

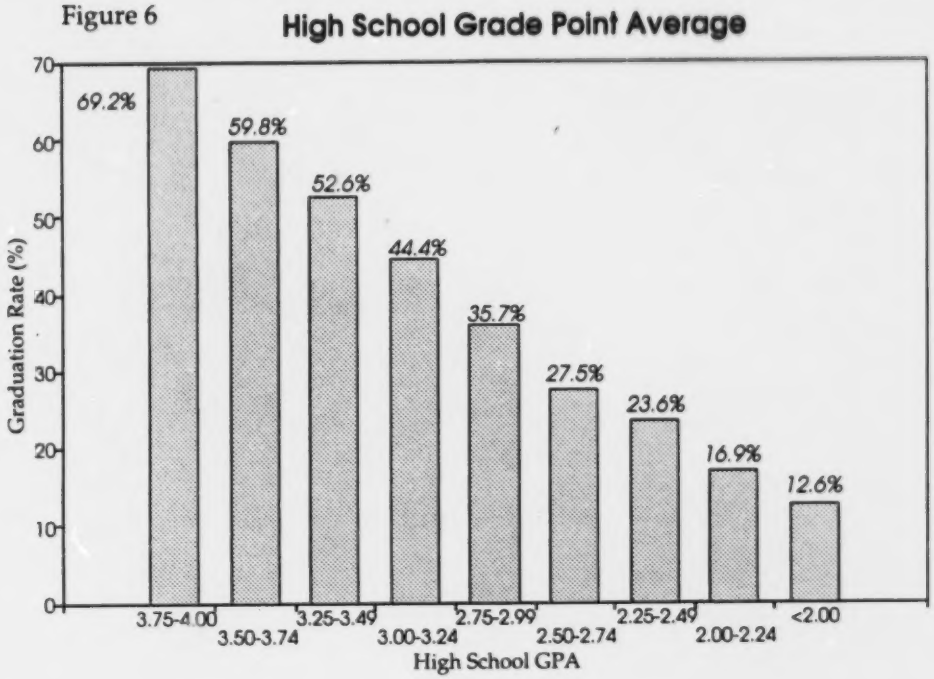


Figure 7

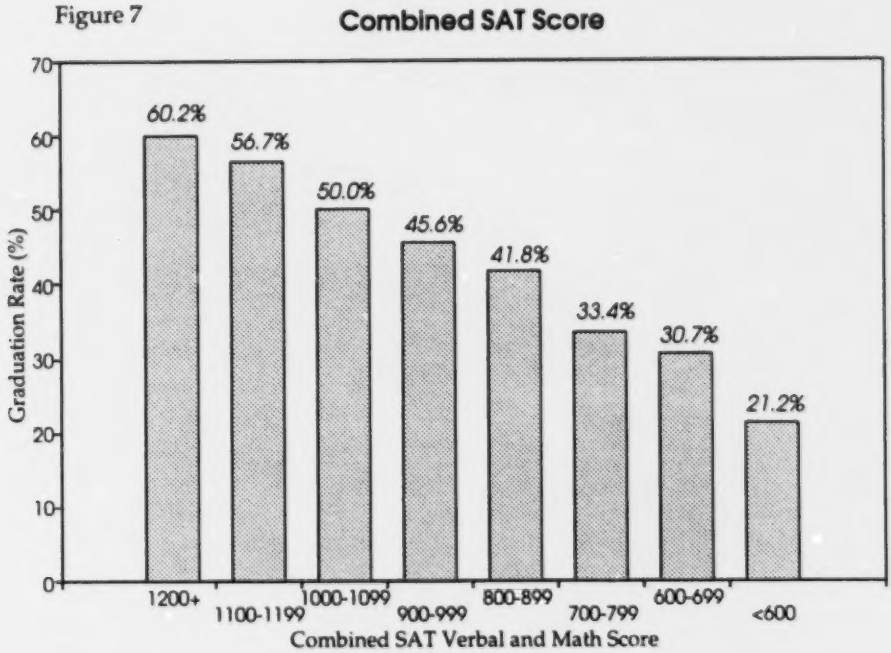


Table 12

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by High School GPA

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
3.75-4.00														
Still enrolled	613	82.4	550	73.9	512	68.8	251	33.7	53	7.1	24	3.2	21	2.8
Graduated	0	0.0	0	0.0	4	0.5	245	32.9	460	61.8	502	67.5	515	69.2
Not enrolled	131	17.6	194	26.1	228	30.6	248	33.3	231	31.0	218	29.3	208	28.0
Total cohort	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0	744	100.0
3.50-3.74														
Still enrolled	770	78.7	656	67.1	617	63.1	318	32.5	78	8.0	21	2.1	35	3.6
Graduated	0	0.0	0	0.0	6	0.6	243	24.8	504	51.5	568	58.1	585	59.8
Not enrolled	208	21.3	322	32.9	355	36.3	417	42.6	396	40.5	389	39.8	358	36.6
Total cohort	978	100.0	978	100.0	978	100.0	978	100.0	978	100.0	978	100.0	978	100.0
3.25-3.49														
Still enrolled	841	74.6	709	62.9	640	56.8	377	33.5	89	7.9	45	4.0	42	3.7
Graduated	0	0.0	0	0.0	2	0.2	207	18.4	487	43.2	568	50.4	593	52.6
Not enrolled	286	25.4	418	37.1	485	43.0	543	48.2	551	48.9	514	45.6	492	43.7
Total cohort	1,127	100.0	1,127	100.0	1,127	100.0	1,127	100.0	1,127	100.0	1,127	100.0	1,127	100.0
3.00-3.24														
Still enrolled	872	67.8	703	54.6	631	49.0	401	31.2	116	9.0	44	3.4	48	3.7
Graduated	0	0.0	0	0.0	2	0.2	169	13.1	459	35.7	549	42.7	571	44.4
Not enrolled	415	32.2	584	45.4	654	50.8	717	55.7	712	55.3	694	53.9	668	51.9
Total cohort	1,287	100.0	1,287	100.0	1,287	100.0	1,287	100.0	1,287	100.0	1,287	100.0	1,287	100.0
2.75-2.99														
Still enrolled	714	64.0	530	47.5	467	41.9	316	28.3	111	10.0	53	4.8	62	5.6
Graduated	0	0.0	0	0.0	3	0.3	91	8.2	290	26.0	365	32.7	398	35.7
Not enrolled	401	36.0	585	52.5	645	57.8	708	63.5	714	64.0	697	62.5	655	58.7
Total cohort	1,115	100.0	1,115	100.0	1,115	100.0	1,115	100.0	1,115	100.0	1,115	100.0	1,115	100.0
2.50-2.74														
Still enrolled	522	61.3	387	45.4	327	38.4	216	25.4	92	10.8	52	6.1	46	5.4
Graduated	0	0.0	0	0.0	0	0.0	58	6.8	158	18.5	220	25.8	234	27.5
Not enrolled	330	38.7	465	54.6	525	61.6	578	67.8	602	70.7	580	68.1	572	67.1
Total cohort	852	100.0	852	100.0	852	100.0	852	100.0	852	100.0	852	100.0	852	100.0
2.25-2.49														
Still enrolled	245	56.1	168	38.4	149	34.1	113	25.9	50	11.4	28	6.4	28	6.4
Graduated	0	0.0	0	0.0	0	0.0	16	3.7	61	14.0	93	21.3	103	23.6
Not enrolled	192	43.9	269	61.6	288	65.9	308	70.5	326	74.6	316	72.3	306	70.0
Total cohort	437	100.0	437	100.0	437	100.0	437	100.0	437	100.0	437	100.0	437	100.0
2.00-2.24														
Still enrolled	84	54.5	58	37.7	44	28.6	35	22.7	13	8.4	8	5.2	8	5.2
Graduated	0	0.0	0	0.0	0	0.0	3	1.9	20	13.0	25	16.2	26	16.9
Not enrolled	70	45.5	96	62.3	110	71.4	116	75.3	121	78.6	121	78.6	120	77.9
Total cohort	154	100.0	154	100.0	154	100.0	154	100.0	154	100.0	154	100.0	154	100.0

Table 12 (continued)

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by High School GPA

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<2.00														
Still enrolled	42	44.2	25	26.3	21	22.1	15	15.8	11	11.6	6	6.3	6	6.3
Graduated	0	0.0	0	0.0	0	0.0	2	2.1	6	6.3	10	10.5	12	12.6
Not enrolled	53	55.8	70	73.7	74	77.9	78	82.1	78	82.1	79	83.2	77	81.1
Total cohort	95	100.0	95	100.0	95	100.0	95	100.0	95	100.0	95	100.0	95	100.0
Unknown														
Still enrolled	236	61.9	165	43.3	124	32.5	55	14.4	26	6.8	9	2.4	8	2.1
Graduated	0	0.0	4	1.0	10	2.6	64	16.8	94	24.7	110	28.9	112	29.4
Not enrolled	145	38.1	212	55.6	247	64.8	262	68.8	261	68.5	262	68.8	261	68.5
Total cohort	381	100.0	381	100.0	381	100.0	381	100.0	381	100.0	381	100.0	381	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 13

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by SAT Score (Math and Verbal Combined)

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1200 or above														
Still enrolled	458	79.7	399	69.4	364	63.3	209	36.3	70	12.2	30	5.2	26	4.5
Graduated	0	0.0	0	0.0	6	1.0	134	23.3	284	49.4	325	56.5	346	60.2
Not enrolled	117	20.3	176	30.6	205	35.7	232	40.3	221	38.4	220	38.3	203	35.3
Total cohort	575	100.0	575	100.0	575	100.0	575	100.0	575	100.0	575	100.0	575	100.0
1100-1199														
Still enrolled	606	78.8	514	66.8	463	60.2	284	36.9	83	10.8	40	5.2	38	4.9
Graduated	0	0.0	0	0.0	2	0.3	156	20.3	346	45.0	415	54.0	436	56.7
Not enrolled	163	21.2	255	33.2	304	39.5	329	42.8	340	44.2	314	40.8	295	38.4
Total cohort	769	100.0	769	100.0	769	100.0	769	100.0	769	100.0	769	100.0	769	100.0
1000-1099														
Still enrolled	864	72.1	715	59.7	655	54.7	362	30.2	100	8.3	46	3.8	57	4.8
Graduated	0	0.0	0	0.0	5	0.4	236	19.7	496	41.4	578	48.2	599	50.0
Not enrolled	334	27.9	483	40.3	538	44.9	600	50.1	602	50.3	574	47.9	542	45.2
Total cohort	1,198	100.0	1,198	100.0	1,198	100.0	1,198	100.0	1,198	100.0	1,198	100.0	1,198	100.0
900-999														
Still enrolled	972	70.4	775	56.1	713	51.6	410	29.7	123	8.9	43	3.1	60	4.3
Graduated	0	0.0	0	0.0	3	0.2	216	15.6	514	37.2	608	44.0	630	45.6
Not enrolled	409	29.6	606	43.9	665	48.2	755	54.7	744	53.9	730	52.9	691	50.0
Total cohort	1,381	100.0	1,381	100.0	1,381	100.0	1,381	100.0	1,381	100.0	1,381	100.0	1,381	100.0
800-899														
Still enrolled	839	67.1	664	53.1	595	47.6	374	29.9	107	8.6	52	4.2	52	4.2
Graduated	0	0.0	0	0.0	1	0.1	163	13.0	429	34.3	500	40.0	523	41.8
Not enrolled	411	32.9	586	46.9	654	52.3	713	57.0	714	57.1	698	55.8	675	54.0
Total cohort	1,250	100.0	1,250	100.0	1,250	100.0	1,250	100.0	1,250	100.0	1,250	100.0	1,250	100.0
700-799														
Still enrolled	486	61.8	367	46.6	310	39.4	202	25.7	64	8.1	32	4.1	34	4.3
Graduated	0	0.0	0	0.0	0	0.0	75	9.5	199	25.3	249	31.6	263	33.4
Not enrolled	301	38.2	420	53.4	477	60.6	510	64.8	524	66.6	506	64.3	490	62.3
Total cohort	787	100.0	787	100.0	787	100.0	787	100.0	787	100.0	787	100.0	787	100.0
600-699														
Still enrolled	207	57.2	159	43.9	143	39.5	90	24.9	27	7.5	14	3.9	18	5.0
Graduated	0	0.0	0	0.0	0	0.0	28	7.7	84	23.2	107	29.6	111	30.7
Not enrolled	155	42.8	203	56.1	219	60.5	244	67.4	251	69.3	241	66.6	233	64.4
Total cohort	362	100.0	362	100.0	362	100.0	362	100.0	362	100.0	362	100.0	362	100.0
Below 600														
Still enrolled	76	55.5	52	38.0	43	31.4	30	21.9	10	7.3	8	5.8	2	1.5
Graduated	0	0.0	1	0.7	1	0.7	7	5.1	21	15.3	25	18.2	29	21.2
Not enrolled	61	44.5	84	61.3	93	67.9	100	73.0	106	77.4	104	75.9	106	77.4
Total cohort	137	100.0	137	100.0	137	100.0	137	100.0	137	100.0	137	100.0	137	100.0

Table 13 (continued)

Cumulative Retention, Graduation, and Attrition of First-Time Freshmen Entering 1986-87, by SAT Score (Math and Verbal Combined)

Total Oregon State System

	Fall 1987		Fall 1988		Fall 1989		Fall 1990		Fall 1991		Fall 1992		Fall 1993	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Unknown														
Still enrolled	431	60.6	306	43.0	246	34.6	136	19.1	55	7.7	25	3.5	17	2.4
Graduated	0	0.0	3	0.4	9	1.3	83	11.7	166	23.3	203	28.6	212	29.8
Not enrolled	280	39.4	402	56.5	456	64.1	492	69.2	490	68.9	483	67.9	482	67.8
Total cohort	711	100.0	711	100.0	711	100.0	711	100.0	711	100.0	711	100.0	711	100.0
Grand Total														
Still enrolled	4,939	68.9	3,951	55.1	3,532	49.3	2,097	29.2	639	8.9	290	4.0	304	4.2
Graduated	0	0.0	4	0.1	27	0.4	1,098	15.3	2,539	35.4	3,010	42.0	3,149	43.9
Not enrolled	2,231	31.1	3,215	44.8	3,611	50.4	3,975	55.4	3,992	55.7	3,870	54.0	3,717	51.8
Total cohort	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0	7,170	100.0

Table 14

Using Astin's Formula to Calculate the Expected 4-year Completion Rate or Being Still Enrolled

Formula: a + b1(HSGPA) + b2(SAT-M) + b3(SAT-V) + b4(female) + b5(American Indian) + b6(African American)
Constant (a) = .0145
Multiple R = .303

	b coeff	UO	OSU	PSU	WOSC	SOSC	EOSC	OIT
Mean HSGPA: Actual	--	3.20	3.24	2.96	3.09	2.93	2.92	2.93
Mean HSGPA: Astin's value*	0.0515	5	5	4	5	4	4	4
SAT-Math	0.000529	513	522	466	454	456	420	470
SAT-Verbal	0.000278	479	457	420	423	438	395	426
Female**	0.0420	1.5619	1.4281	1.4942	1.5767	1.5255	1.4456	1.3810
American Indian**	-0.1297	1.0043	1.0094	1.0058	1.0105	1.0094	1.0136	1.0201
African American**	-0.0299	1.0106	1.0103	1.0431	1.0070	1.0027	1.0068	1.0075
Expected 4-yr completion or continued enrollment		58.2%	57.4%	48.5%	53.5%	48.7%	45.2%	48.3%
Actual 4-yr completion or continued enrollment		53.5%	56.2%	30.6%	32.6%	27.9%	22.5%	27.6%

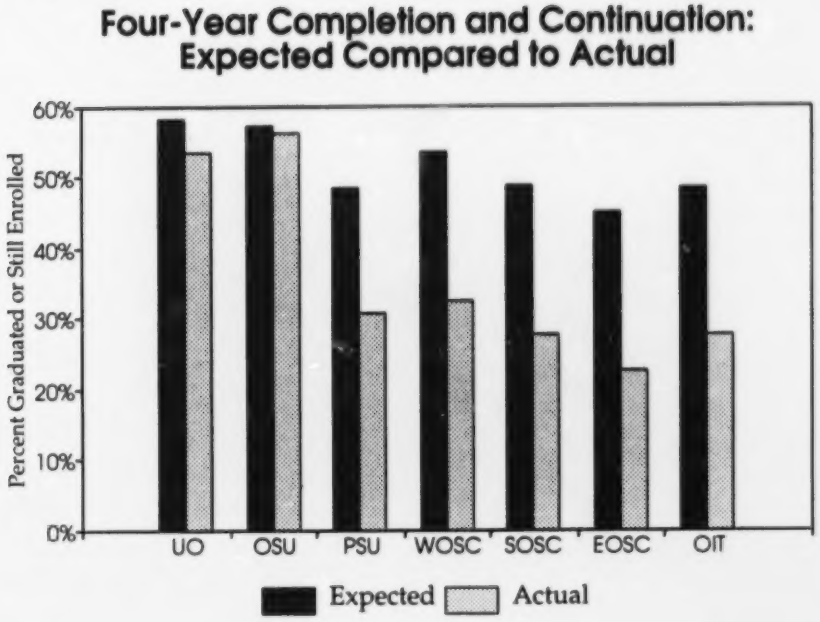
* Astin uses different values for grade point average. Those values, along with the traditional GPA scale equivalents, are shown below:

Letter Grade	Astin's Value	Actual GPA
A or A+	8	3.75-4.00
A-	7	3.50-3.74
B+	6	3.25-3.49
B	5	3.00-3.24
B-	4	2.75-2.99
C+	3	2.25-2.74
C or C-	2	1.75-2.24
D or less	1	< 1.75

**In Astin's calculation, institution gender and ethnic values range between 1.0 and 2.0. Thus, if 56% of the cohort are women, the "female" value for that institution would be 1.56.

Source: Astin, Alexander, "How Good is Your Institution's Retention Rate?" Unpublished paper, University of California, Los Angeles, 1993 (Table 2).

Figure 8


Four-Year Completion and Continuation:
Expected Compared to Actual
Percent Graduated or Still Enrolled
60%
50%
40%
30%
20%
10%
0%
UO
OSU
PSU
WOSC
SOSC
EOSC
OIT
Expected
Actual